



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,624	11/28/2001	Masao Fukuda	ISHDP165D1	6089

22434 7590 11/03/2003
BEYER WEAVER & THOMAS LLP
P.O. BOX 778
BERKELEY, CA 94704-0778

EXAMINER

HARMON, CHRISTOPHER R

ART UNIT PAPER NUMBER

3721

DATE MAILED: 11/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 15

Application Number: 09/996,624
Filing Date: November 28, 2001
Appellant(s): FUKUDA ET AL.

Keiichi Nishimura
For Appellant

EXAMINER'S ANSWER

MAILED

NOV 3 2003

GROUP 3700

This is in response to the appeal brief filed 10/7/03.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences, which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 1-5 and 18-20 stand or fall together.

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

5,125,217	Fukuda	6-1992
4,930,403	Husted	6-1990

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukuda (US 5,125,217).

Fukuda discloses a packaging machine comprising a cylindrical chute with means for bending a film S into a tubular form 103; a heater unit 55 for longitudinally sealing overlapping side edges (figure 1); heater driver unit 45, which moves heater unit between retracted and operating positions (figure 8); and an air cylinder 78 for controlling the compressive force of the heater unit 55 and film S. The air pressure is regulated at a specified level. Universal joint 68 allows for a further retracted position of the heater unit 55 from film S; see column 7, lines 10-15.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-5, and 19-20 are rejected¹ under 35 U.S.C. 103(a) as being unpatentable over Fukuda (US 5,125,217) in view of Husted (US 4,930,403)

The invention to Fukuda does not disclose a pressure regulating means and controller for controlling the compressive force of the air cylinder, however Husted teaches an air cylinder with a control system for controlling/regulating air pressure to the air cylinder. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Husted in the invention of Fukuda to modify the air pressure to the air cylinder for controlling the speed/distance of the travel.

Claims 3 and 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda (US 5,125,217).

Fukuda discloses "different combinations of motion-communicating and torque-communicating means can be substituted." (column 8, lines 34-36). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute an additional air cylinder in place of screw axis 59 for assisting in the movement of heater 55.

(11) Response to Argument

Applicant's arguments filed 10/7/03 have been fully considered but they are not persuasive.

Issue 1: The air cylinder 78 effectively moves the vertical sealing belt 55 in order to seal the web by direct contact; Applicant stipulates as much (page 5, section VIII, first

Art Unit: 3721

paragraph). The compressive force is thereby "controlled" by air cylinder 78.

Movement of the heater inherently controls the compressive force against the web and the forming structure, which the operator/manufacturer has to consider when setting control limitations for movement of the heater.

While features of an apparatus may be recited either structurally or functionally, claims directed towards an apparatus must be distinguished from the prior art in terms of structure rather than function. See *In re Schreiber*, 128 F.3d 1473-78, 44 USPQ2d 1429-32 (Fed.Cir. 1997) and *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed.Cir. 1990).

Issue 2: In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Fukuda states "different combinations of motion-communicating and torque-communicating means can be substituted." (column 8, lines 34-36). In response to applicant's argument that bits and pieces of different references were combined, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed

¹ Claims 1, 4, and 5 are alternatively rejected.

Art Unit: 3721

invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).


Issue 3: Air cylinders are well known actuators for controlling movement of operational elements and thus are considered motion-communicating devices (normally a tool, connector, etc. is attached to the distal end of a piston thereby affecting movement of such an element). Fukuda directly states "different combinations of motion-communicating and torque-communicating means can be substituted." (column 8, lines 34-36). Air cylinders are considered obvious substitutes of screw axes operated by servo-motors to one of ordinary skill in the art for affecting movement. For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Chris Harmon
October 30, 2003

Conferees

Rinaldi Rada 
Supervisory Patent Examiner


Eugene Kim
Primary Examiner

BEYER WEAVER & THOMAS LLP
P.O. BOX 778
BERKELEY, CA 94704-0778